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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,046	10/17/2001	Joseph G. Barrett	06975-132002	3693

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EXAMINER

REILLY, SEAN M

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/978,046	Applicant(s) BARRETT ET AL.	
	Examiner Sean Reilly	Art Unit 2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12, 14-44, 46, 48, 50-69 and 83-128 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12, 14-44, 46, 48, 50-69 and 83-128 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/15/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This application has been assigned to another Examiner.

This Office action is in response to Applicant's amendment and request for reconsideration filed on October 25, 2005. Claims 1-10, 12, 14-44, 46, 48, 50-69, and 83-128, are presented for further examination. Although these claims were previously indicated as allowable, after further consideration all claims are no longer deemed allowable. Prosecution is re-opened and accordingly this office action is made **NON-FINAL**. Note the previously purposed Examiner's amendment (outlined in the interview summary, 11/28/2005) will overcome the following 101 and 112 rejections with regard to all claims except claims 97-111, as claims 97-111 were not addressed in the amendment since they were to be canceled.

Priority

1. Applicant claims priority to provisional application 60/204574, filed May 16th, 2000, and application 09/749630, filed December 28th, 2000.
2. The effective filing date for the subject matter defined in the pending claims in this application is May 16th, 2000.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 8/15/2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

4. The current status of the parent nonprovisional application(s) must be updated on pg 1 of the specification.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 34-69, 90-96, and 120-128 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are not limited to tangible embodiments. In view of Applicant's disclosure, specification page 4, lines 18-21, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., a storage medium) and intangible embodiments (e.g., a propagated signal). As such, the claims are not limited to statutory subject matter and are therefore non-statutory.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 83-111 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
7. With regard to claims 83 and 90, the limitation “wherein determining the address includes determining an Internet protocol address” is unclear. For clarification Applicant should remove this limitation and INSERT “Internet Protocol” prior to all instances of the term address.
8. With regard to claim 97, the limitation “the sender identifier” lacks antecedent basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-2, 5-6, 10, 12, 15-17, 19-20, 22-25, 31-35, 38-39, 46, 48, 50-53, 55-56, 58-61, 68-69, 97, 99-100, 102-105, 111-117, 119, 120-125, 127-128 are rejected under 35 U.S.C. 102(e) as being anticipated by Paul (U.S. Patent Number 6,052,709).

With regard to claims 1, 10, 15, 34, 97, 112, and 120, Paul disclosed a method for communicating electronic data in a manner that identifies a sender, the method comprising:

Receiving electronic data at an intermediary located between a sender and an intended recipient of the electronic data (server receives an email message for a user, Col 8, lines 19-20);

Identifying the sender at the intermediary, wherein identifying the sender comprises:

Determining an address from which the electronic data is received (Col 5, lines 10-15); and

Determining a sender identifier based on the address from which the electronic data is received (e.g. code for identifying a “JUNK” sender, Col 6, lines 46-52 or Col 8, lines 62-65), wherein determining the sender identifier includes determining a user-defined identifier based on the address from which the electronic data is received (the user is able to enter codes to mark the e-mails, see inter alia Col 5, lines 40-43 and Col 9, lines 42-57);

Changing the electronic data to include the sender identifier based on the identifying performed at the intermediary (adding in the code, for instance “JUNK” Col 8, lines 62-65);

Forwarding at least a selected portion of the changed electronic data to the intended recipient (the server sends or routers the message including the display code to the user, Col 8, lines 19-21).

With further regard to the additional limitations of claim 97, refer to dependent claim 17 below.

With further regard to independent claims 112 and 120, Paul further disclosed redirecting the received electronic data from the intended recipient to a computing device capable of performing at least the identifying (“e-mail filter 504” and “exclusion list processor 502,” col. 8, lines 19-26, 44-60).

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With regard to claim 2, Paul further disclosed that the sender is not a host (i.e. the sender is just a regular e-mail sender).

With regard to claims 5 and 14, Paul further disclosed the sender identifier comprise a screen name (i.e. "JUNK" is a display identifier).

With regard to claim 6, Paul further disclosed the sender identifier comprise account information (i.e. "JUNK" designates the account as being a spammer).

With regard to claim 12, Paul further disclosed determining the address includes determining an Internet protocol address (Col 5, lines 10-20).

With regard to claim 16, Paul further disclosed that appending the information identifying the sender includes appending the information identifying the sender as a header to the electronic data (col. 7, lines 3-5, "inserting the word 'JUNK' at the beginning of the message's 'SUBJECT' header field").

With regard to claim 17 and independent claim 97, Paul further disclosed:

Determining whether the electronic data received from the sender has characteristics of a message to be blocked (col. 6, lines 45-58, describing detecting the "FROM" field, among others); and

Blocking the electronic data when the electronic data is determined to have characteristics of a message to be blocked (col. 6, line 59 – col. 7, line 1, wherein messages from particular senders are marked as “JUNK” and are automatically discarded);

Wherein forwarding at least a selected portion of the changed electronic data comprises forwarding the changed electronic data that is not determined to have characteristics of a message to be blocked (same sections, wherein messages labeled as “JUNK” can still be delivered and are appended with the label “JUNK”).

With regard to claim 19, Paul further disclosed that determining whether the electronic data has data characteristics of a message to be blocked comprises determining whether the electronic data has characteristics of a message to be blocked based upon a data packet (i.e. IP Address, col. 5, lines 10-15).

In considering claim 20, Paul further discloses that determining whether the electronic data has data characteristics of a message to be blocked comprises determining whether the electronic data has characteristics of a message to be blocked based upon the identification of the sender (i.e. IP Address of the sender, col. 5, lines 10-15).

In considering claim 22, Paul further discloses blocking the electronic data based upon a data packet (i.e. the address and other information found in the packet, col. 5, lines 10-20).

In considering claim 23, Paul further discloses blocking the electronic data based upon the identification of a sender (i.e. the IP address of the sender, col. 5, lines 10-20).

In considering claim 24, Paul further discloses determining whether the electronic data relates to undesirable news postings (“pornographic subject matter”) such that data having characteristics of undesirable news postings is blocked (col. 9, lines 49-53; col. 6, line 67 – col. 7, line 1).

In considering claim 25, Paul further discloses determining whether the electronic data has characteristics of spam (“spam”) such that data having characteristics of spam is blocked (col. 6, line 45 – col. 7, line 1).

In considering claim 31, Paul further discloses that identifying the sender includes identifying an initial source that generated the electronic data (“IP address of the sender,” col. 5, lines 10-15).

In considering claim 32, Paul further discloses redirecting the received electronic data from the intended recipient to a computing device capable of performing at least the identifying (“e-mail filter 504” and “exclusion list processor 502,” col. 8, lines 19-26, 44-60).

In considering claim 33, Paul further discloses changing a destination address associated with the received electronic data from the intended recipient to the computing device (inherent in the process of sending it to the processor and e-mail store).

Claim trees 34, 36-39, 46, 48, 50-53, 56, 58-61, 68-69 and 97, 99-100, 102-105, 111 and 112, 114-117, 119 and 120-125, 127-128 essentially parallel the scope of claims 1-2, 5-6, 10, 12, 15-17, 19-20, 22-25, 31-33 and are thus rejected using a similar rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3-4, 7, 36, 37, 40, 83-88, 90-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul (U.S. Patent Number 6,052,709).

With regard to claims 3-4, 7, 36, 37, 40, 83, 90, Paul disclosed substantial features of the claimed invention however, Paul failed to specifically recite that the sender identifier is an IP address or identifier of a person. Nonetheless these features are not patentably distinct. The goal of Paul's system is to append information (codes) to emails so that users of the system can discern emails as being spam based on the sender of the email. Paul disclosed adding codes to the email for this discerning (i.e. adding the code "JUNK" to identify the sender as being a JUNK sender, see inter alia Col 5, lines 34-45). Paul further disclosed that any code could be

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used (Col 5, lines 34-45) and that users may manually configure the filtering applications (Col 9, lines 42-57). Accordingly users could enter any codes they desire to be appended to emails that allow the email senders to be identified as spammers. As evidenced by Paul, IP addresses are a form of sender identifiers that may be used to identify spammers (Col 5, lines 10-20).

Accordingly users may have used sender IP addresses for the appended code in Paul's system, as opposed to the exemplarily code "JUNK." Additionally the name of the spammer (a person) would also have been another equally applicable code users may have desired to use since a name is easily disguisable for users and thus users could easily recognize well known names of spammers. Thus, it would have obvious to one of ordinary skill in the art to include any code in Paul's system, such as a sender IP address or the sender name, since such the use of such codes would have allowed users to easily identify spammers.

1. Claims 8, 9, 18, 21, 41-44, 54, 57, 98, and 101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul, in view of Venkatachary et al. (U.S. Patent No. 6,212,184, hereinafter "Venkatachary").

In considering claims 8, 18, 21, 41, 43, 44, 54, 57, 98, and 101, although the system taught by Paul discloses substantial features of the claimed invention, it does not describe that the intermediary or its components comprise a layer 4 redirection program. Nonetheless, it would be desirable to implement the redirection program on the lowest layer possible, because processing at a lower layer will take less time than processing at the application layer.

Furthermore, the use of layer 4 redirection in an e-mail message filtering system is well known, as evidenced by Venkatachary (see col. 6, lines 42-60, and col. 6, lines 16-49, giving an

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overview of the layer 4 message filtering system). Thus, it would have been obvious to a person having ordinary skill in the art to use layer 4 redirection for the message filtering system taught by Paul, in order to provide a faster message processing system.

In considering claims 9 and 42, the layer 4 redirection system taught by Venkatachary identifies senders based on the data packets examined (col. 6, lines 32-41; col. 8, lines 38-49, describing examining the packet for different fields, including a source address).

2. Claims 26-30, 62-67, 89, 96, 106-110, 118, and 126 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul, in view of Aronson et al. (U.S. Patent No. 6,654,787, hereinafter "Aronson").

Note that Aronson discloses an e-mail filtering system that can be used in combination with the system taught by Paul (see Aronson, col. 4, lines 45-56).

In considering claim 26, Aronson discloses an additional way to determine whether electronic data has characteristics of spam by counting the number of connections that are made by the sender (col. 5, lines 59-60, "IP source frequency analysis"). Thus, given this knowledge, a person having ordinary skill in the art would have readily recognized the desirability and advantages of determining to block the spam in the system taught by Paul by counting the sender connection frequency, and blocking spam after the frequency rises above a threshold. Such a technique would have been obvious to use to detect spam in the system taught by Paul, because once spam is sent in massive numbers across the Internet, it begins to degrade network performance and clog users' e-mail boxes.

Although Aronson discloses counting connection frequency, it does not describe counting a number of open connections. Nonetheless, Examiner takes official notice that sending spam over open connections, such as over chat rooms or instant messaging applications, is well known in the art. Given this knowledge, it would have been obvious to a person having ordinary skill in the art to use the techniques taught by Aronson and Paul to prevent spamming on chat room systems by counting the number of open spam connections, in order to reduce the number of dissatisfied customers who use chat services.

In considering claim 27, it would have been further obvious to allow the frequency analysis taught by Paul and Aronson to be configurable, to allow an administrator to select when he or she thinks a spammer has become dangerous towards the network.

In considering claim 28, Aronson further discloses blocking future electronic data from the sender for at least a period of time when the electronic data is determined to have characteristics of a message to be blocked (col. 6, lines 31-37, describing that filters can last for certain periods of time). Given this teaching, it would have been obvious to a person having ordinary skill in the art to block spammers for only temporary periods of time, to avoid building an unmanageable number of filters (see Aronson, col. 6, lines 39-43).

In considering claim 29, Aronson discloses an additional way to determine whether electronic data has characteristics of spam by counting the number of communications of electronic data that have been received from the sender during a period of time (col. 5, lines 59-

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60, "IP source frequency analysis"). Thus, given this knowledge, a person having ordinary skill in the art would have readily recognized the desirability and advantages of determining to block the spam in the system taught by Paul by counting the sender communication frequency, and blocking spam after the frequency rises above a threshold. Such a technique would have been obvious to use to detect spam in the system taught by Paul, because once spam is sent in massive numbers across the Internet, it begins to degrade network performance and clog users' e-mail boxes.

In considering claim 30, although Aronson does not describe the period of time in great detail (it is simply inherent that the analysis will span some period of time), it would have been obvious to allow the time period to be configurable, so that an administrator could select when he or she thinks is a reasonable period of time in which repeated messages sent by a single sender could constitute spam.

Claims 62-65, and 67 describe a computer readable medium for performing the same method as respective claims 26-29 and 30, and are thus rejected for the same reasons.

In considering claim 66, it would have been further obvious to allow the frequency analysis taught by Paul and Aronson to be configurable, to allow an administrator to select when he or she thinks a spammer has become dangerous towards the network.

Response to Arguments

In this office action Examiner has reapplied the Paul reference. Examiner respectfully disagrees with Applicant's past arguments where Applicant does not equate the code (e.g. JUNK code) of Paul's system to a sender identifier. Examiner maintains that the code is a sender identifier since it is derived based on the senders address (see inter alia, Col 5, lines 10-46).

Conclusion

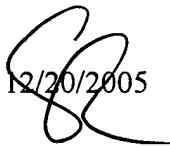
11. The prior art made of record, in PTO-892 form, and not relied upon is considered pertinent to applicant's disclosure.
12. This office action is made **NON-FINAL**.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Reilly whose telephone number is 571-272-4228. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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12/20/2005


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